

LETTER TO EDITOR

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Plasma cell leukemia of IgG secreting type: A rare case

Parth Anil Desai, Sagar Dholariya, Sanjeev Gupta, Tejinder Singh

To the Editor,

Plasma cell leukemia is very rare comprising 2% plasma cell dyscrasias [1]. We report a case of a 49-year-old male with complaints of chest pain, breathlessness, and acute attacks of gastroenteritis. On examination, there was marked pallor and hepatosplenomegaly. X-ray and computed tomography (CT) scan revealed multiple paratracheal lymph node enlargements. However, there was no diffuse osteopenia or multiple osteolytic lesions. Laboratory analysis revealed high serum calcium 11.5 mg/dL, low hemoglobin 5 g/dL, normal WBC count, thrombocytopenia 22000/mm³ and elevated erythrocyte sedimentation rate (ESR). Peripheral smear showed many atypical cells (41%) with blastoid morphology, giving a blood picture of acute leukemia. However, on closer inspection many of them appeared plasmacytoid. There was marked rouleaux formation of red cells in the background. Bone marrow aspirate and biopsy also revealed near total replacement by such atypical cells with plasmacytoid morphology. Serum electrophoresis revealed a prominent M spike and immunofixation revealed IgG heavy chain and kappa light chain immunostaining ruling out the possibility of Waldenström's macroglobulinemia. Plasma cell

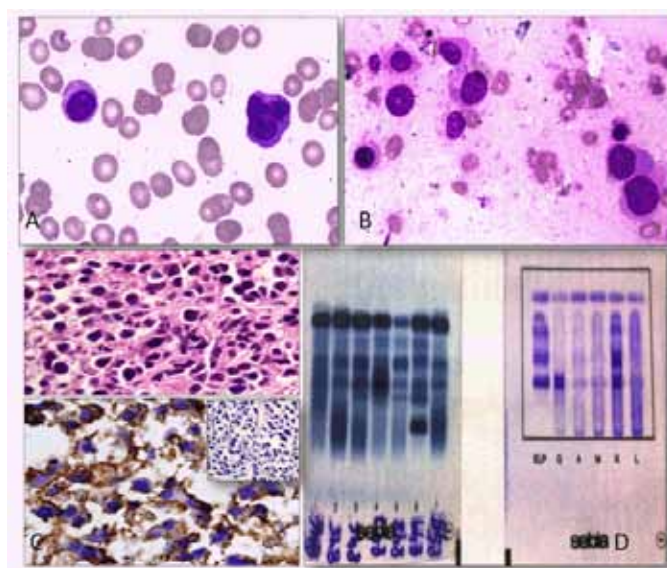


Figure 1: (A) Peripheral Smear (Giemsa): Blastoid cells with plasmacytoid cells and background rouleaux formation, (B) Bone marrow aspirate smear: Plasmacytoid cells with prominent nucleoli, (C) Bone marrow biopsy: Replacement by atypical plasmacytoid cells. Kappa positive and lambda (inset) negative immunostaining, (D) Serum electrophoresis (left) showing M spike and immunofixation (right) showing G heavy chain and kappa light chain.

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leukemias are predominantly IgD and IgE secreting type [2–4]. This case is rare in that it is IgG secreting type. Plasma cell leukemias are very aggressive and with higher incidence of organomegaly, lymphadenopathy, thrombocytopenia, hypercalcemia, renal impairment and surprisingly lesser occurrence of lytic bony lesions as in our case [1, 2, 4].

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Guarantor

The corresponding author is the guarantor of submission.

Conflict of Interest

Authors declare no conflict of interest.

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REFERENCES

1. García-Sanz R, Orfão A, González M, et al. Primary plasma cell leukaemia: Clinical, immunophenotypic, DNA ploidy, and cytogenetic characteristics. *Blood* 1999 Feb 1;93(3):1032–7.
2. Kyle RA, Maldonado JE, Bayrd ED. Plasma cell leukaemia. Report on 17 cases. *Arch Intern Med* 1974 May;133(5):813–8.
3. Pruzanski W, Platts ME, Ogryzlo MA. Leukemic form of immunocytic dyscrasia (plasma cell leukaemia). A study of ten cases and a review of the literature. *Am J Med* 1969 Jul;47(1):60–74.
4. Dimopoulos MA, Palumbo A, Delasalle KB, Alexanian R. Primary plasma cell leukaemia. *Br J Haematol* 1994 Dec;88(4):754–9.

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